

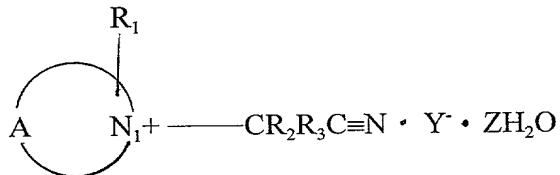
APPENDIX I

In the Claims:

1. A substantially solid composition comprising:

a compound with the structure of Formula I

FORMULA I



wherein A is a saturated ring formed by a plurality of atoms in addition to the N<sub>1</sub> atom, the saturated ring atoms including at least one carbon atom and at least one heteroatom in addition to the said at least one heteroatom selected from the group consisting of O, S, and N atoms, the substituent R<sub>1</sub> bound to the N<sub>1</sub> atom of the Formula I structure is (a) a C<sub>1-8</sub> alkyl or alkoxylated alkyl where the alkoxy is C<sub>2-4</sub>, (b) a C<sub>4-24</sub> cycloalkyl, (c) a C<sub>7-24</sub> alkaryl, (d) a repeating or nonrepeating alkoxy or alkoxylated alcohol, where the alkoxy unit is C<sub>2-4</sub>, or (e) -CR'<sub>2</sub>R'<sub>3</sub>C≡N where R'<sub>2</sub> and R'<sub>3</sub> each H, a C<sub>1-24</sub> alkyl, cycloalkyl, or alkaryl, or a repeating or nonrepeating alkoxy or alkoxylated alcohol where the alkoxy unit is C<sub>2-4</sub>, the R<sub>2</sub> and R<sub>3</sub> substituents being each H, a C<sub>1-24</sub> alkyl, cycloalkyl, or alkaryl, or a repeating or nonrepeating alkoxy or alkoxylated alcohol where the alkoxy unit is C<sub>2-4</sub>, Z is a value in the range of 0 to 10, and wherein Y is monovalent or multivalent and is sulfate, bisulfate, tosylate, or mixtures of sulfate and bisulfate as counterion, the Formula I compound capable of reacting with a peroxygen source in alkaline solutions; and,

a bleaching and/or cleaning adjuvant carried by, coated with, or admixed with the compound.

2. The Formula I compound as in Claim 1 wherein A is a saturated ring

formed by four carbon atoms and one oxygen atom in addition to the N<sub>1</sub> atom.

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3. The Formula I compound as in Claim 1 wherein A is a saturated ring formed by four carbon atoms and an N<sub>1</sub> atom in addition to the N<sub>1</sub> atom, with N<sub>2</sub> being a secondary amine, a tertiary amine having the substituent -CR<sub>5</sub>R<sub>6</sub>CN or a quaternary amine having the substituents -R<sub>5</sub> and -CR<sub>5</sub>R<sub>6</sub>CN, wherein R<sub>5</sub> and R<sub>6</sub> may each be a H or C<sub>1-16</sub> alkyl.

4. The composition as in Claim 1 wherein the Formula I compound is from about 1 wt.% to less than about 100 wt.% of the composition total.

5. The composition as in Claim 1 being substantially non-hygroscopic.

6. The composition as in Claim 1 wherein the composition includes from about 1 wt.% to about 99 wt. % of another compound related to the Formula I compound, but differing therefrom in counterion, and wherein Formula I compound is in an amount effective for reduced hygroscopicity of the salt composition.

7. The composition as in Claim 1 wherein the Formula I compound has a water uptake of less than about 5 wt.% water at 80% R.H. and 80°F at equilibrium or about 48 hours.

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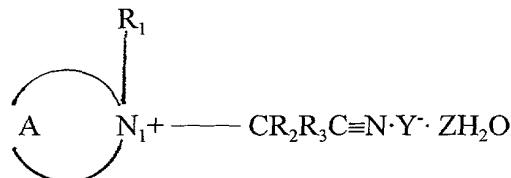
8. The composition as in Claim 1 wherein Z is a value in the range of 0 to 6.

9. The composition as in Claim 2 wherein R<sub>1</sub> is methyl, ethyl, or butyl.

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10. A substantially solid composition comprising:  
a compound with the structure of Formula I

FORMULA I



wherein A is a saturated ring formed by five atoms in addition to the N<sub>1</sub> atom, the five saturated ring atoms being four carbon atoms and a heteroatom, the substituent R<sub>1</sub> bound to the N<sub>1</sub> atom of the Formula I structure is (a) a methyl, ethyl, or butyl group or alkoxylated alkyl where the alkoxy is C<sub>2-4</sub>, (b) a C<sub>4-24</sub> cycloalkyl, (c) a C<sub>7-24</sub> alkaryl, (d) a repeating or nonrepeating alkoxy or alkoxylated alcohol, where the alkoxy unit is C<sub>2-4</sub>, or (e) -CR'<sub>2</sub>R'<sub>3</sub>C≡N where R'<sub>2</sub> and R'<sub>3</sub> are each H, a C<sub>1-24</sub> alkyl, cycloalkyl, or alkaryl, or a repeating or nonrepeating alkoxy or alkoxylated alcohol where the alkoxy unit is C<sub>2-4</sub>, the R<sub>2</sub> and R<sub>3</sub> substituents are each H, a C<sub>1-24</sub> alkyl, cycloalkyl, or alkaryl, or a repeating or nonrepeating alkoxy or alkoxylated alcohol where the alkoxy unit is C<sub>2-4</sub>, Z is a value in the range of 0 to 10, and wherein Y is monovalent or multivalent and is sulfate, bisulfate, tosylate, or mixtures of bisulfate and sulfate as counterion; and,

5 a bleaching and/or cleaning adjuvant carried by, coated with, or admixed with the compound.

10 11. The composition as in Claim 10 being substantially non-hygroscopic.

15 12. The composition as in Claim 10 wherein the Formula I compound is from about 1 wt.% to about 100 wt. % of the total composition.

20 13. The composition as in Claim 10 wherein the composition includes from about 1 wt.% to about 99 wt.% of another compound related to the Formula I compound, but differing therefrom in counterion, and wherein Formula I compound is in an amount effective for reduced hygroscopicity of the salt composition.

25 14. The composition as in Claim 10 wherein the Formula I compound has a water uptake of less than about 5 wt.% water at 80% R.H. and 80°F at equilibrium or about 48 hours.

30 15. The composition as in Claim 10 wherein Z is 0 to 1.

16. The composition as in Claim 10 wherein the heteroatom is oxygen or sulfur and R<sub>1</sub> is a lower alkyl.

17. The composition as in Claim 16 being in the form of flowable granules.

18. The composition as in Claim 17 wherein the granules have an average particle size between about 100  $\mu\text{m}$  to about 1200  $\mu\text{m}$ .

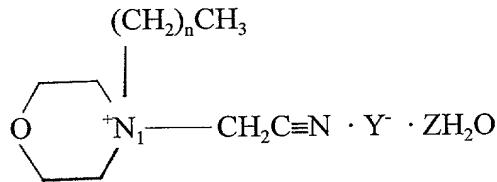
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19. The composition as in Claim 17 wherein the granules are substantially non-aggregating under ambient conditions.

20. A substantially solid salt composition comprising:

a compound with the structure of Formula II

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**FORMULA II**



wherein n is 0 to 7, Z is a value in the range of 0 to 10, and Y is monovalent or multivalent and is sulfate, bisulfate, tosylate, or mixtures of sulfate and bisulfate as counterion; and

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a bleaching and/or cleaning adjuvant carried by, coated with, or admixed with the compound.

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21. The salt composition as in Claim 20 wherein the Formula II compound is from about 1 wt.% to about 100 wt.% of the composition total.

22. The salt composition as in Claim 20 being substantially non-hygroscopic.

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23. The salt composition as in Claim 20 wherein the salt composition includes from about 1 wt% to about 99 wt.% of another compound related to the Formula II compound, but differing therefrom in counterion, and wherein Formula II compound is in an amount effective for reduced hygroscopicity of the salt composition.